

REMARKS

The Office Action of September 20, 2004 has been carefully reviewed. Claims 46, 47, 53 and 55-57 are pending in the present application.

In the Office Action, claims 46, 47, 52, 53, and 55-57 stand rejected under 35 U.S.C. 102(b) as being anticipated by, or in the alternative, under 35 U.S.C. 103(a) as being obvious over Bock et al. (US 4,831,092). This rejection is respectfully traversed.

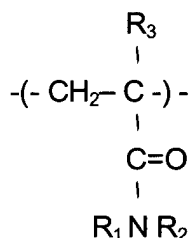
The present application relates to a cationic vinyl addition polymer. The cationic vinyl addition polymer according to the present invention may be utilized as an additive in paper making, particularly for use as a drainage (e.g. dewatering) aid. The claimed invention is exemplified in the present application. For instance, Example 1 discloses a polymer P4 prepared from acrylamide, methacryloxaminopropyl trimethylammonium chloride and N-isopropyl acrylamide. In Example 5, polymer P4 is tested as a dewatering aid, showing better dewatering than the polymer Reference 2 which was prepared from acrylamide and acryloxyethyl trimethylammonium chloride and which is commonly used as a dewatering aid.

Bock relates to a polymer for use in the clean up of waste water, especially waste water containing oil. More specifically, Bock relates to a polymer comprising a non-ionic monomer, a cationic monomer and (meth)acrylamide. It is respectfully submitted that Bock does not teach, disclose or suggest the presently claimed invention in which the presently claimed non-ionic monomer (a) is present. A careful review of the disclosure of Bock reveals that in the formula on column 7, Bock discloses and teaches as follows in regard to the non-ionic monomer (the first monomer having the value x):

*"R₁ is preferably a C₄ to C₂₂ linear or branched alky, alkylcycloalkyl, or alkylaryl group, **more preferably C₆ to C₂₂**, and **most preferably C₈ to C₁₈**; R₂ is the same or different group as R₁, or hydrogen or C₁ to C₃ linear or branched alkyl group; R₃ is hydrogen or methyl"* (emphasis added).

It is readily apparent that Bock does not disclose the presently claimed invention in which the non-ionic monomer is selected from the group consisting of N-n-propyl (meth)acrylamide and N-isopropyl (meth)acrylamide.

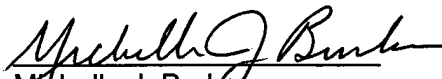
Using the same formula designations as used by Bock, the non-ionic monomers claimed in claim 46 of the present application could be represented as follows:



wherein R₁ would be a C₃ alkyl group; n-propyl or isopropyl, R₂ would be hydrogen and R₃ would be hydrogen or methyl. In contrast, Bock discloses that the R₁ group should have at least 4 carbon atoms. In fact, Bock actually **teaches away from the presently claimed invention** in that the R₁ group should more preferably have from 6 to 22 carbon atoms and most preferably from 6 to 18 carbon atoms. There is no information whatsoever in Bock that the R₁ group could have less than 4 carbon atoms. Instead, there are strong teachings in Bock to the fact that the R₁ group should have many carbon atoms, especially since the most preferred range of Bock is from 6 to 18 carbon atoms.

It is respectfully submitted that absent hindsight reliance on Applicants' disclosure, Bock cannot be reasonably construed as disclosing or suggesting the claimed invention. Thus, the present invention is considered both novel and non-obvious over Bock and the Applicants respectfully requests that the present application be found in condition for immediate allowance.

Respectfully submitted,


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